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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,170	09/26/2001	Tatsuya Ito	04995-030001	9594

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/964,170

Applicant(s)

ITO ET AL.

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

Applicants' response of 1/12/04 has been considered with the following results.

#### ***Information Disclosure Statement***

Applicants' submission with respect to the previously cited JP documents on his IDS provides for an English abstract and translation of JP 58-822212 and JP 6-30165. These documents are made of record.

#### ***Specification***

The amendment to the title of the invention is greatly appreciated and has been entered.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1- 4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular as originally disclosed mirror is attached to TWO ribs, at three points – as shown and depicted as elements 31a and 31b and the three dots in figure 3. As now recited in the independent claims, the mirror is attached to three points to a vertical wall. This is NEW MATTER, since in fact the three points are not attached to a SINGLE VERTICAL WALL.

The dependent claims fail to correct and fall with their respective independent claim.

The following art rejections are made as the claims are interpreted.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1,2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al considered with JP58-082212.

With respect to claims 1 and 2, applicants' attention is drawn to figures 5 and 6 and the disclosure thereof. The mirror element 42 is attached to two wall sections, elements along either end thereof. One end having a clip spring 41 and the other end closer to the LD (element 30). The following interpretation is made.

Because the end of the mirror is a planar surface, as is the ribs/sections of the housing to which the mirror ends are attached, and two points define a plane, the claimed limitations with respect to:

"a side part of said half mirror is fixed to a vertical wall of said frame at three points" is considered present and hence met.

There is no disclosure as to how these mirror sides are attached.

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The newly submitted abstract of JP document 58-82212, the ability of adhering such a mirror element to a frame using an adhesive.

It would have been obvious to modify the base system of Kawasaki et al with the above teaching of using an adhesive and fix the ends of the mirror accordingly. Use of adhesives in this environment for their inherent use/ability is recognized by the JP document and the use of such to ensure stable connection, i.e., limit movement of the mirror, is a desired feature so as to ensure proper light beam orientation to and fro the record medium.

***Response to Arguments***

Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 above, and further in view of Iijima et al.

Iijima et al teach the particular type of adhesive recited in claim 4.

It would have been obvious to modify the references as stated above in paragraph 2 with the above teaching from Iijima et al, because the JP 58-082212 document only describes an adhesive, and photo-cured resin adhesives are a type of adhesive. Selection among adhesives is considered an exercise in routine engineering/manufacture considerations predicated upon such criteria as cost, adhesiveness, availability, etc. yielding the same result as an adhesive – adhering components together. Selection among equivalents is considered obvious unless unexpected results occur.

***Response to Arguments***

Applicant's arguments with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection.

4. Claims 1,2,3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al further considered with Iijima et al.

With respect to claims 1 and 2, applicants' attention is drawn to figures 5 and 6 and the disclosure thereof. The mirror element 42 is attached to two wall sections, elements along either end

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thereof. One end having a clip spring 41 and the other end closer to the LD (element 30). The following interpretation is made.

Because the end of the mirror is a planar surface, as is the ribs/sections of the housing to which the mirror ends are attached, and two points define a plane, the claimed limitations with respect to:

"a side part of said half mirror is fixed to a vertical wall of said frame at three points" is considered present and hence met.

There is no disclosure as to how these mirror sides are attached.

The use of adhesive agents in the manufacturing art for its ability to adhere components together is considered known and further taught by the Iijima et al.

It would have been obvious to modify the base system of Kawasaki et al with the above teaching of adhesives for its inherent ability/use of adhering components together. Use of such in manufacturing devices is considered a well-known ability in order to limit motion/vibration of the components, in this case the mirror, which then permits a more stable impinging of the light beam to and fro the medium.

With respect to claim 3, the examiner interprets the section/area closer to the LD in Kawasaki et al as meeting this limitation.

With respect to claim 4, the adhesive in Iijima et al is such.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

5. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasahara further considered with JP 58-82212.

Kasahara discloses in the optical pick up environment, the pick up element, the light-emitting element (portion), the mirror (mirror 23) in Kasahara, the detecting portion and the frame.

There is no clear depiction as to how the mirror is adhered to the frame.

The abstract of JP document 58-82212 newly submitted by applicants, discloses the ability of adhering such a mirror element to a frame using 3 contact points.

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It would have been obvious to modify the base system of Kasahara and modify such with the above well-established methodology of adhering the mirror to the frame. Motivation is to use existing techniques for adhesion and hence save valuable resources such as time in trial and error testing for different adhesion protocols.

With respect to claim 3, because the mirror 23 abuts the frame and it has both a horizontal and vertical component, and the horizontal component is interpreted as that part to which the light-emitting portion is fixed, while the vertical component is interpreted as to the opposing part, therefore these limitations are met.

#### ***Response to Arguments***

Applicant's arguments with respect to claim 1 have been considered but are not persuasive.

As argued, the JP document only provides for the three-point contact at the base.

As depicted in figure 5 of Kasahara, the frame to which the mirror 23 is abutted to has both a horizontal and vertical component. Because 3 points define a surface and there is surface contact between element 23 and the vertical (unnumbered section) wall, the examiner concludes that the 3-point contacts are present. Whether one designates/equates the horizontal or vertical component of the frame to the "base" of the JP 58-82212 document, is not of patentable weight.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 above as stated in paragraph 5, and further in view of Iijima et al.

Iijima et al teach the particular type of adhesive recited in claim 4.

It would have been obvious to modify the references as stated above in paragraph 5 with the above teaching from Iijima et al, because the JP 58-082212 document only describes an adhesive, and photo-cured resin adhesives are a type of adhesive, selection among adhesives is considered an exercise in obvious considerations predicated upon such criteria as cost, adhesiveness, availability, etc. and resulting the same result as an adhesive – adhering components together.

#### ***Conclusion***

7. JP 9-320086 also discloses in this environment the use of a mirror, which is attached to the frame at particular points – see paragraph 0019 –26 in the accompanying MAT (Machine assisted translation).

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This reference can be relied upon in place of either Kawasaki et al or Kasahara for teaching/showing the same features relied upon above in place of Kasahara or Kawasaki et al.

Sasaki et al is also cited as illustrative of photo-cured adhesives.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**Hard copies of the application files are now separated from this examining corps; hence the examiner can answer no questions that require a review of the file without sufficient lead-time.**

**Any inquiries concerning missing papers/references, etc. must be directed to Group 2600 Customer Services at (703) 306-0377.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos  
Primary Examiner  
Art Unit 2653



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